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**WHAT IS CLAIMED IS:**

## CLAIMS

1. A method of communications, comprising:
  - allocating a first code to a first subscriber station;
  - assigning a first sub-code derived from the first code to support a dedicated channel to the first subscriber station;
  - assigning a second code to support a dedicated channel to a second subscriber station; and
  - assigning a second sub-code derived from the first code to support a supplemental channel to the second subscriber station.
2. The method of claim 1 further comprising assigning a third sub-code derived from the first code to support a second supplemental channel to the second subscriber station.
3. The method of claim 1 wherein the first subscriber station is in soft handoff and the second subscriber station is not in soft handoff.
4. The method of claim 1 further comprising separating communications to the second subscriber station into first and second portions, spreading the first portion of the communications with the second code, and spreading the second portion of the communications with the second sub-code.
5. The method of claim 1 wherein the first sub-code comprises a plurality of concatenated copies of the first code.
6. The method of claim 1 further comprising signaling to the second subscriber station the first code.
7. A method of communications, comprising:
  - separating a plurality of subscriber stations into first and second groups;
  - allocating a different first code from a plurality of orthogonal codes to each of the subscriber stations in the first group;

assigning each of the subscriber stations in the first group either its allocated first code or a first sub-code derived from its allocated first code, to support a dedicated channel; and

assigning a second sub-code derived from one of the first codes to support a communications channel to one of the subscriber stations in the second group.

8. The method of claim 7 further comprising assigning a second code to support a dedicated channel to said one of the subscriber stations in the second group, and wherein the communications channel comprises a supplemental channel to support overflow communications not supported by the dedicated channel.

9. The method of claim 8 further comprising separating communications to said one of the subscriber stations in the second group into first and second portions, spreading the first portion of the communications with the second code, and spreading the second portion of the communications with the second sub-code.

10. The method of claim 7 further comprising assigning a third sub-code from said one of the first codes to support a second communications channel to said one of the subscriber stations in the second group.

11. The method of claim 7 wherein the subscriber stations in the first group are in soft handoff and the subscriber stations in the second group are not in soft handoff.

12. The method of claim 7 wherein the first sub-codes each comprises a plurality of concatenated copies of its respective first code.

13. The method of claim 7 further comprising signaling to said one of the subscriber stations in the second group said one of the first codes.

14. A method of communications, comprising:  
receiving information from a base station comprising a first code;  
searching through the first code to locate a sub-code;

despreading a supplemental channel from the base station with the sub-code;

despreading a dedicated channel from the base station with a second code; and

combining communications on the dedicated and supplemental channels.

15. The method of claim 14 wherein the information comprises a plurality of codes including the first code.

16. The method of claim 14 wherein the information identifies the first code as containing the sub-code.

17. The method of claim 14 wherein the information is carried on the dedicated channel.

18. The method of claim 18 wherein the information is carried on an overhead channel.

19. A communications station, comprising:

a processor configured to allocate a first code to a first subscriber station, assign a first sub-code derived from the first code to support a dedicated channel to the first subscriber station, assign a second code to support a dedicated channel to a second subscriber station, and assign a second sub-code derived from the first code to support a supplemental channel to the second subscriber station.

20. The communications station of claim 19 wherein the processor is further configured to assign a third sub-code derived from the first code to support a second supplemental channel to the second subscriber station.

21. The communications station of claim 19 wherein the processor is further configured to receive information indicating that the first subscriber station is in soft handoff and that the second subscriber station is not in soft handoff, the allocation of the

first code to a first subscriber station being based on the first subscriber station being in soft handoff, and the assignment of the second code to support the dedicated channel to a second subscriber station is based on the second subscriber station not being in soft handoff.

22. The communications station of claim 19 further comprising a modulator configured to separate communications to the second subscriber station into first and second portions, spread the first portion of the communications with the second code, and spread the second portion of the communications with the second sub-code.

23. The communications station of claim 19 wherein the processor is further configured to derive the first sub-code by concatenating a plurality of copies of the first code.

24. The communications station of claim 19 wherein the processor is further configured to signal to the second subscriber station the first code.

25. A communications station, comprising:

a processor configured to separate a plurality of subscriber stations into first and second groups, allocate a different first code from a plurality of orthogonal codes to each of the subscriber stations in the first group, assign each of the subscriber stations in the first group either its allocated first code or a first sub-code derived from its allocated first code, to support a dedicated channel, and assign a second sub-code derived from one of the first codes to support a communications channel to one of the subscriber stations in the second group.

26. The communications station of claim 25 wherein the processor is further configured to assign a second code to support a dedicated channel to said one of the subscriber stations in the second group, and wherein the communications channel comprises a supplemental channel used by the processor to support overflow communications not supported by the dedicated channel.

27. The communications station of claim 26 further comprising a modulator configured to separate communications to said one of the subscriber stations in the second group into first and second portions, spread the first portion of the communications with the second code, and spread the second portion of the communications with the second sub-code.

28. The communications station of claim 25 further comprising assigning a third sub-code from said one of the first codes to support a second communications channel to said one of the subscriber stations in the second group.

29. The communications station of claim 25 wherein the processor is further configured to receive information indicating whether each of the subscriber stations are in soft handoff, and separate the subscriber stations by placing the subscriber stations in soft handoff in the first group and the subscriber stations that are not in soft handoff in the second group.

30. The communications station of claim 25 wherein the first sub-codes each comprises a plurality of concatenated copies of its respective first code.

31. The communications station of claim 25 wherein the processor is further configured to signal to said one of the subscriber stations in the second group said one of the first codes.

32. A subscriber station, comprising:

a demodulator configured to receive information from a base station comprising a first code, search through the first code to locate a sub-code, despread a supplemental channel from the base station with the sub-code, despread a dedicated channel from the base station with a second code, and combine communications on the dedicated and supplemental channels.

33. The subscriber station of claim 32 wherein the information comprises a plurality of codes including the first code.

34. The subscriber station of claim 32 wherein the information identifies the first code as containing the sub-code.

35. The subscriber station of claim 32 wherein the information is carried on the dedicated channel.

36. The subscriber station of claim 32 wherein the information is carried on an overhead channel.

37. A communications station, comprising:

means for allocating a first code to a first subscriber station;

means for assigning a first sub-code derived from the first code to support a dedicated channel to the first subscriber station;

means for assigning a second code to support a dedicated channel to a second subscriber station; and

means for assigning a second sub-code derived from the first code to support a supplemental channel to the second subscriber station.

38. A communications station, comprising:

means for separating a plurality of subscriber stations into first and second groups;

means for allocating a different first code from a plurality of orthogonal codes to each of the subscriber stations in the first group;

means for assigning each of the subscriber stations in the first group either its allocated first code or a first sub-code derived from its allocated first code, to support a dedicated channel; and

means for assigning a second sub-code derived from one of the first codes to support a communications channel to one of the subscriber stations in the second group.